DOCUMENT RESUME

ED 411 606 EA 028 654

AUTHOR Allison, Derek J.; Morfitt, Grace; Allison, Patricia A.
TITLE Shop Talk: Topics, Themes and Tips in Conversations between Principals.
PUB DATE 1996-06-00
NOTE 31p.; Paper presented at the Annual Meeting of the Canadian Association for the Study of Educational Administration (St. Catherine's, Ontario, Canada, June 4-7, 1996).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Administrator Responsibility; Discussion Groups; Elementary Secondary Education; *Interprofessional Relationship; *Principals; *Problem Solving; *Professional Development; *School Administration
IDENTIFIERS *Conversation

ABSTRACT

What do principals discuss when they get together to "talk shop?" This paper offers some answers and discusses implications for the preparation and professional development of school leaders. The activities reported in the paper were undertaken as part of the Cognitive Approaches to School Leadership (CASL) Project. In the broadest terms the project seeks to apply a set of related theories about how people think about and think through problems to the study of school administration. Data came from observation of a 13-session discussion group composed of 7 principals and from transcription of their conversations. The findings support previous research showing that informal conversations among principals were primarily concerned with the internal aspects of school and school-system operations. One-half of the discussion group's topics of conversation dealt with concrete aspects of school functioning; however, the other half of the topics dealt with more abstract subjects, such as relationship and philosophical issues. The data indicate that principals need secure and open arenas to foster broader professional discussion. Four tables and one figure are included. (Contains 47 references.) (LMI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 411 606

Shop talk: Topics, themes and tips in conversations between principals

Derek J. Allison, Grace Morfitt and Patricia A. Allison

The University of Western Ontario

Paper prepared for the annual meeting of

The Canadian Association for the Study of Educational Administration

Brock University

June, 1996

BEST COPY AVAILABLE

The research reported in this paper was supported by a grant form the Social Sciences and Humanities Research Council of Canada

EA 028 654

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

D. Allison

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Shop talk: Topics, themes and tips in conversations between principals

What do principals discuss when they get together to "talk shop?" What topics and themes are threaded through their conversations? What advice do they seek from and give to each other? This paper offers some answers to these questions, answers which are obviously circumscribed by the selection of participants and the methodological limitations imposed by the intrusion of researchers into the conversational arena. The paper also offers what we think are some interesting answers to the question of "Why bother?"--answers which draw on the theoretical framework underlying the broader study which gave rise to this inquiry, and which consider implications for the preparation and professional development of school leaders.

Theoretical foundation and conceptual perspectives

The activities reported in this paper were undertaken as part of our Cognitive Approaches to School Leadership [CASL] Project. In the broadest terms this project is seeking to apply a set of related theories about how people think about and through problems to the study of school and school system administration. The project is currently committed to two main lines of inquiry. One is investigating the applicability of Elliott Jaques' (1976; 1989) theories of time span of discretion and levels of abstraction in administrative work to Ontario school systems (Allison & Morfitt, in press). The other consists of what we have come to call the Principal Problem Processing [PPP] strand. This line of inquiry grew out of earlier studies by Nagy & P. Allison (1988; 1989) of how principals thought through case problems, and the work of Leithwood and his colleagues in pioneering the application of cognitive science theories to the study of educational administration (Leithwood & Montgomery, 1986; Leithwood & Stager, 1989; Leithwood & Steinbach, 1995). Data for our first round PPP study were collected in 1989--90 (Allison & Nagy 1991; Allison & Allison, 1991; 1993), with a second round of data collection occurring in 1993--95 (Allison 1996b; Allison & Morfitt, 1996). The activities reported in this paper were initiated as part of our preparations for the second round PPP study.

As discussed in greater detail elsewhere (Allison, 1996a), the broad theoretical framework for the CASL Project is derived from developments in cognitive science (e.g. Simon & Kaplan, 1989; Simon, 1993), from applications of cognitive science theories of problem solving to the study of administrative work (e.g. Cowan, 1986, 1991; Day & Lord, 1992; Hallinger, Leithwood & Murphy, 1993), and from other inquires into how administrators understand and think about their work (e.g. Isenberg, 1984; Jaques, 1976, 1986; Mintzberg, 1973; Srivastra, 1983; Vickers, 1984). Our PPP studies are grounded in the cognitive science literature addressing differences between the knowledge structures and problem solving processes characteristic of novices and experts (see Ericsson & Charness, 1994; Chi, Glasser & Farr, 1988; Reimann & Chi, 1989; VanLehn, 1989 for recent reviews). Briefly, experts within a specialized domain--such as chess, medical diagnosis or school leadership--are believed to have amassed and integrated substantial stores of relevant declarative and procedural knowledge which enables them to recognize, classify, interpret, and respond to domain problems more readily and accurately than domain novices. Clarifying differences between how more and less proficient domain practitioners think about and through domain problems--and especially how they draw on and apply potentially relevant knowledge stored in memory--are thus major lines of inquiry which we wanted to pursue further in our second round PPP study. Analysis of concurrent think aloud protocols has become established as the generally preferred method of conducting such research (Simon & Kaplan, 1988). Protocols are generated by presenting subjects with appropriate domain problems and then asking them to verbalize their thoughts as they think about the problems, transcription of recorded responses providing data for analysis. To apply this technique in our PPP studies we thus needed to identify one or more problems from the domain of school administration and leadership which we could present to our participants and ask them to think about aloud.

In search of problems in school administration

Identifying appropriate problems for our purposes turned out to be more problematic than we anticipated. We initially set out to identify a problem rooted in the technical core of the elementary school principalship which would nevertheless be at least partially comprehensible to graduate

students specializing in domains other than educational administration this being the population from which we intended to recruit our true novice comparison subjects. In searching for one or more such problems we looked in all the usual places--the literature, the memories and current circumstances of some practising principals, unpublished research notes--and we also initiated the discussion group which led to this paper. As it turned out, none of the problems we found in our various searches offered marked advantages over the case problem we had used in our earlier PPP study, and thus we eventually decided to use that same case problem so as to expand our dataset by pooling think aloud protocols from the two studies. Some comments on the results of our search are nonetheless called for.

We found the contemporary literature less than fruitful. Bridges' 1982 review of the scholarly and research literature of educational administration found surprisingly little interest in and attention to the practical problems encountered by educational administrators and, while increased attention has been given to describing and classifying problems of practice in more recent years (e.g. Lighthall & Allan, 1989; Hoy & Tarter, 1995; Kelsey, 1993; Leithwood, Begley & Cousins, 1992; Leithwood, Cousins & Smith, 1989/90), the level of interest and activity in this area remains relatively low. Moreover, many of the domain problems presented as such in the literature take the form of case studies written primarily for instructional purposes. This would not necessarily be a handicap were it not for the hegemony of the theory movement on one hand and normative models of decision making on the other. The academic fall-out of the theory movement has ensured that most contemporary text books are stuffed full of more or less pertinent conceptual models, baldly summarized research findings, and trendy perspectives, and when such texts include case studies for the edification of their readers the problems presented are often crafted to invite analysis through the theoretical perspectives promoted in the accompanying chapter. The distortions introduced by these practices are often exaggerated by the long established emphasis of viewing administrative problems as situations which are to be resolved by selecting and initiating an appropriate decision making process. This is undoubtedly an apt recipe for some situations, but directs attention away from problems and problem responses that are not easily accommodated by

the primarily normative models of decision making that populate our texts. Other more obvious limitations associated with case problems presented in the mainstream literature inhere in the specifics of particular situations. At times, problems presented or reported in the literature contain elements that do not easily or sensibly translate to other contexts, while those that are sufficiently generic to overcome such limitations typically lack desirable detail.

Given the concerns and limitations noted above, we naturally turned to the lived realities of local principals in our search for suitable problems. We had accumulated a set of problems reported by area principals during the interviews conducted in our first PPP study (Allison & Allison, 1991), but on review these, too, appeared too context specific, too general, or too bland. Attempts to expand our problem bank through discussions with other principals yielded mixed results. In the absence of at least a minimal climate of mutual trust, most principals either side-stepped an invitation to talk about their current problems or responded only in broad generalities, as is appropriate given ethical considerations. When an appropriate rapport had been established and ethical guarantees pledged, some principals were willing to describe, discuss and reflect on selected problems, sometimes in considerable detail, but others still had little to say to us. As we learned, the word "problem" is often viewed as carrying negative connotations, and in some circumstances may be interpreted as posing an implicit threat. Such connotations appear to help explain the responses from a few principals who told us they "didn't have any problems--everything was under control." In these instances the theory-in-practice appears to be that an administrator's competence is inversely related to the number of problems to be dealt with, fewer problems indicating higher levels of proficiency, and no problems at all representing the acme of administrative acumen. In sharp contrast, some other principals have been keen to share the richness of their problem portfolios, proudly retelling the stories of past problems satisfactorily resolved (or, at times, regretfully bungled), reviewing the interesting aspects of problems they were working on, and sketching anticipated problems maturing in the wings or temporarily placed on hold. Needless to say, the literature associates administrative proficiency with the latter rather than the former disposition, more successful and expert administrators characteristically appearing to relish the

challenges associated with finding and working on what they see as new and interesting problems (Isenberg, 1984; Mintzberg, 1973; Leithwood & Steinbach, 1995).

Rationale for a discussion group

The importance of establishing a mutually respectful and trusting context within which principals could be encouraged to talk openly about their problems prompted us to consider inviting a group of practising principals who knew and respected each other from previous encounters to participate in regular discussions of their work while we listened and made an unobtrusive record of their conversations. We were encouraged to pursue this idea by three additional considerations. First, it can be lonely at the top. This truism may not apply as forcibly to the elementary principalship as it does to positions of high command, but principals are nonetheless apex administrators, occupying their position at the top of their school's hierarchies of formal communication, legal responsibility and official authority all by themselves. Contemporary norms of collegiality, ideals of empowerment and precepts of participatory democracy may at times obscure this ultimate organizational reality, but it nonetheless remains and however much a principal may strive to live and act by participatory ideals he or she will never escape the imperative necessity to decide and act alone from time to time. Moreover, the nature of information flows in any organization ensure that apex administrators are in a position--literally--to know more about what is going on in the organization at large than any other member. Their richer, more inclusive knowledge about their school, its staff, students, families and its environmental and institutional contexts is a key resource for resolving the problems that others bring (or send) to them and for identifying areas for development or improvement which are not evident to others. This unique understanding of their school and its people further distances principals from their colleagues as, of course, does their knowledge about people and situations which they cannot ethically share with others. All of this implies that principals will likely have uniquely informed understandings of school leadership which are inaccessible to their co-workers. As such, we reasoned that principals would likely welcome an opportunity to discuss and compare their understandings of their work with colleagues.

But surely, one may protest, principals must already do this as a matter of course. True enough, but previous research suggests that the level of informal discussion among and between principals is typically limited to contacts within small and often inbred networks of peers. The sociograms generated by Johnson and Licata (1983) and Licata and Hack (1980), for example, show the principals in the two school systems studied interacting within small clan-like groups based on geographical proximity, school type, and/or past acquaintance. These principals, as well as those studied by Garber (1991), talked to each other primarily over the telephone or, to a lesser extent, during encounters before or after formally scheduled meetings, relatively little interaction occurring in social or other out-of-work settings. These studies report that most of the topics discussed in these conversations were associated with school organization and operation such as scheduling, staffing, discipline, curriculum and interpersonal matters (Garber, 1991, p. 8--9), or topical system-wide concerns, issues and initiatives. In both of the Licata studies a common motivation for informal communication between principals "involved a need to be in synchrony with decisions of peers" (Johnson & Licata, 1983, p. 471). As explained by one principal, consulting colleagues is "a way of cross-checking so I wouldn't be caught out on a limb" (Licata & Hack, 1980, p. 91). These studies do not offer any firm insights into the frequency with which principals access their informal sources of information and advice, apart from the general observation that this varies according to circumstances and conditions. Garber's (1991) survey suggests that experience is likely a relevant variable, with both newly appointed and highly experienced principals engaging in more frequent informal discussions than those in the middle of the experience continuum. Even so, principals appear to spend little time communicating with other principals, some striking statistics reported by Pepin (1986, as cited by Dussault and Thibodea, 1996, p. 3) portraying principals devoting only 0.07% of their communication to interaction with peers as opposed to 1.05% with superordinates. These general findings, which largely conformed to our informal observations, provided the second additional impetus for the organization of a principals' discussion group: given the apparently limited and constrained settings within which principals seek and share information about their work, then a forum dedicated to discussing problems of practice in a supportive setting would offer

enriched opportunities for professional development. Moreover, we were interested in seeing whether opportunities for face-to-face discussions that extended beyond the limited time usually available for informal consultations would lead to discussions of broader topics and issues.

Our third consideration was in some ways an extension of the second. One of the insights emerging from the Licata studies discussed above was that the informal communication structure in school systems "closely parallels the formal organizational structure" (Johnson & Licata, 1983, p. 471). When they consult their peers, principals typically turn to those close to them organizationally or geographically--in the same family of schools, for example--or fraternally--past mentors, sponsors or previous co-workers. In consequence, informal information exchanges between principals will largely take place within closed systems conditioned and constrained by the context and cultures of the school system in which they work. These systemic limitations appear to be legitimated and further constrained by the well documented culture of deference which dominates the selection and socialization of school administrators, especially in larger school systems. By far the majority of principals are appointed to their first--and usually all their subsequent--positions from subordinate roles within the same school system. As noted by Cuban (1976), success as a classroom teacher will likely have bred a respect for and acceptance of hierarchical deference among aspirants to the principalship. To be accepted as protégé principals, however, aspirants must typically engage in what Griffiths and his colleagues (1958) described as GASing--Getting Attention of Superiors. As discussed by Greenfield (1975, 1977a, 1977b), successful GASers are then further socialized to the established administrative values and beliefs in the school system concerned through informal interactions with established principals and superintendents. One consequence of this process of institutionalized cloning is what Wiggins (1975) described as a marked similarity in the behaviour and attitudes of principals within the systems he studied, so much so that he described principals within the same system as being "interchangeable." Another is a predictable lack of cross-boundary communication between principals working in different school systems. Given that many of the problems faced by principals have common elements rooted in the organizational nature of schools as conditioned by

provincial, state or national (as opposed to purely local) policies, then the barriers to a more open professional discourse represented by school system boundaries are unfortunate as well as theoretically dysfunctional. These circumstances and consequences are all readily evident in Ontario school systems. Indeed, the relatively large size of Ontario systems (Allison & Allison, 1990) together with the Province's long history of administrative centralization and sponsored selection as exemplified in the Inspectorate (Allison, 1991; Allison & Wells, 1989) have fostered high levels of hierarchical deference and administrative cloning, with hardly any career mobility between the semi-autonomous fiefdoms and baronies thus created. Our third consideration, then, was that an appropriately structured discussion group would allow principals from different systems to discuss common problems outside of the limitations provided by a single administrative culture. This, we reasoned, would not only provide participants with alternate perspectives on their work, but would allow us to gauge the degree to which system cultures conditioned and constrained the principalship.

The discussion group

Before committing ourselves and others to an activity for which there may have been little support, we invited a selected group of seven principals to an exploratory meeting. All of these principals knew us and each other from previous professional development activities which, we thought, would provide an initial sense of security and trust. We presented the idea of a discussion group as an opportunity for them to get together on a regular basis to talk about problems encountered in their work while we listened and made notes. In the briefing notes distributed at the exploratory meeting we stressed that the "principals who became involved should have control over the direction and content of the discussions" and that it was "not our intent to serve as solution merchants." We explained that while it would be unrealistic to expect all interested participants to attend all of the meetings, a commitment to try and remain involved over the year would be necessary to provide an opportunity for the process to work. All of the seven principals attending the initial meeting expressed interest and, after various questions had been resolved satisfactorily, all agreed to participate.

As in our other attempts to learn from the lived experiences of principals, the negative connotations carried by the word "problem" were a source of initial concern. As expressed by Ben (one of the principals) during the initial meeting, the agreed expectation was that the group would

> look at situations as challenges rather than problems. [I'd] like to see us laying situations on the table in fairly informal talk about things. The day is formal. I'd like to see an informal setup here. How formal? Formally disorganized. The principal is seen as problem-solver in school. I want to relax and discuss what works, what doesn't work. (Extract 1.1, statement #4).

Given the agreed need for a relaxed, informal setting, the selection of an appropriate meeting room was an important consideration. The exploratory meeting was held in a university lounge with pizza being provided by the research team, an arrangement which was deemed unsatisfactory. All subsequent meetings were consequently held in a comfortably sized and appointed private room at a conveniently located restaurant with each participant purchasing his or her own meal. Participants began to assemble around 5:00 p.m., with discussions typically continuing until 7:00 p.m. or later. The principals usually identified a central topic which they wished to discuss at the next meeting, but discussions were generally very open and free-ranging, often focusing on emergent issues and immediate concerns. It was agreed at the outset that audio-taping the sessions would be inappropriate and discussions were recorded through direct transcription into a laptop computer. This is a technique which we had employed in previous research projects with satisfactory results. It allows for "on-the-fly" editing which, among other advantages, made it possible to preserve the anonymity of participants in the initial data record. The obvious disadvantages are that some information is invariably lost and thus the resulting transcripts are not verbatim. In our view, derived from considerable experience in transcribing audio-taped interviews and other verbal data, these disadvantages do not provide a serious reliability threat, especially when the difficulties of producing an accurate transcript from audio-tapes are taken into account. The raw records of each meeting were reviewed by each of the three authors during the weeks following each meeting to produce an expanded and annotated record of the transcribed conversations. As part of this

process. a brief one or two page summary of each meeting was also prepared and circulated to all group members. a practice which they told us they appreciated.

Table 1 summarizes relevant demographic and professional information for the seven participating principals. Each principal undertook to attend as many meetings as possible throughout the balance of the school year and. as shown in the Table. only Hal was unable to attend most of the meetings. With the exception of Ben. who faced a long drive to the meetings. the principals chose to continue the sessions for a second year. although participation rates declined somewhat. To compensate for Ben's absence in the second year Ian. who had recently assumed the Headship of a local independent school and was anxious to establish professional contacts. was invited to join the group. but only managed to attend half of the meetings.

Topics, themes and tips

The thirteen sessions yielded a total of 161 pages of transcribed conversation. Direct transcription ensured that all purely social exchanges had been excluded from the record. the transcripts concentrating on the main threads of discussion. Even so. these threads were often tangled. with the focus of conversation sometimes meandering away from the mainstream before returning to the initial topic and at other times jumping to new topics.. These characteristics made initial analysis of the original transcripts difficult. prompting us to seek ways of chunking the raw data into more coherent and readily analysable units. We did this by seeking to identify internally consistent discussion threads which we then cut and pasted from the original transcripts to create a series of topical extracts. Table 2 provides an example of one such extract. In this case the topic under discussion is timetabling. As illustrated in the Table. the extract begins with Ben explaining how he thinks about the process. and then proceeds with Ben and Cam exchanging "how I do it" information. Statements 10 -- 18, which are primarily concerned with a computerized timetabling progam recently received by Eve have been omitted from Table 2 in the interests of brevity. As summarized in the italicized annotation. the conversation then moved to another topic, captured in a separate extract. before wending its way back to timetabling once more as shown in statements 19 -- 25. Yet another topic then emerged before Ben made a final declaration about timetabling as

captured in statement 26 in the extract. The contents of Table 2 provide a fair but limited sample of the levels of conversation captured in the transcripts. Some conversations were primarily characterized by relatively low level information exchanges, as in statements 4 -- 9; some contributions were declarative value statements, as in Cam's comment in statement 2; some were wisdom statements in which a principal shared a found understanding of some aspect of her or his work, as in Ben's first and final comments; and some shared a current situation or future plan with group members, often with a view to seeking informed comment or advice, as in statements 19 -- 26. Other commonly occurring kinds of statements not illustrated in Table 2 included extended descriptions of current or enduring situations which often took the form of soliloquies on lived experiences punctuated with sympathetic inquires for further information from the others, together with shared possible solutions or just sympathy, and more than a few war stories. We have not been able to classify and analyze statements by these or other emergent types, but would like to do so if and when time and other resources permit.

Table 3 provides a complete list of the discussion topics extracted from the original transcripts while Table 4 offers some summary statistics for the total set of extracts and for various sub-classifications as discussed below. A grand total of 60 extracts was collected, which equates to almost five extracts from each of the 13 meetings. As shown in detail by the counts of total words and statements given in Table 3 there is considerable variation in the length of these extracts, the shortest (#12.2a) containing only 57 words distributed across five individual statements, and the longest as originally extracted (#3.1) containing more than 4,000 words in 135 statements. Extracts containing more than 1,000 words are nonetheless the exception, seven such appearing in the original tabulation, the medians for the original 60 extracts being 442 words and 19 statements, as shown in Table 4.

Table 3 lists the extracts in serial order, the first digit of the extract number appearing in the first column indicating the session transcript from which the extract was taken, and the second digit (after the decimal point) the order in which the extract (or the first statements in the extract) appeared in the transcript. Thus extract #5.2 as shown in Table 2 was the second extract taken

BEST COPY AVAILABLE

from the transcript of the fifth discussion meeting. In two instances, however, there was a clear link between discussion topics in different sessions, the extracts concerned being identified as [linked] in the final column of Table 3. These logically linked extracts were subsequently combined into the composite extracts designated as 5.5b and 12.2b in Table 3, and the original constituent extracts were excluded from further analysis, as indicated by shading of the rows in Table 3. Seven additional extracts are also shaded in Table 3, indicating that they were excluded from further analysis. In these cases they were excluded because they either focused on the discussion process itself (designated as Meta in Table 3) or dealt with special topics of one kind or another. Extract #4.4 "Curriculum continuity between schools," for example, captured a brief interchange on that topic initiated by a visiting UK professor who attended the fourth session.

As summarized in Table 4, a total of ten extracts were excluded from further analysis on the grounds outlined above (three Meta, four special & three linked), while the content of two extracts was expanded by adding the content of logically linked extracts. Figure 1 is a histogram showing the distribution of the number of statements in the 50 extracts retained for further analysis. The histogram bars and the accompanying density trace together with the dot plot shown below the horizontal axis (where each dot represents a single extract) clearly show the preponderance of relatively smaller extracts, the median number of statements (as shown in Table 4) being 19.5, the median number of words per transcript 552.

Table 4 also provides summary statistics for the extracts classified into three emergent thematic categories which we identified in the course of reading, comparing and reflecting on the extracts. As in all such exercises, these categories are far from totally exclusive and clear-cut but they do, we believe, provide a valid and reasonably reliable framework within which to compare and discuss differences. The first and most heavily populated category is labelled Specifics. The extracts classified into this category were primarily concerned with the "nuts and bolts" detailia associated with the internal functioning of participants' schools. The timetabling extract as included in Table 2 provides one example, others being the brief discussion of delegating duties and responsibilities to vice-principals and other staff captured in extract #1.3, the longer exchange

about professional development days in extract #8.2, which was primarily focused on how these are organized in the different school systems, and the exchange of experiences and related reflections on suspending students captured in extract #11.2. This extract contains an illustrative "war story" as told by Dan:

> One boy was on suspension because he assaulted a teacher and me. He took a swing at me, kicked at teachers. I told him I never want to see him again! It started with non-compliance on the school yard. You can't just leave it as you'd like to. [The] last few weeks he just decided what he'd do and not do. Lot's of confrontations with teachers. We sent him home, but he ran onto the roof of the school and threw rocks at the yard supervisor. The kids were yelling for him to jump! He was bombing everything and then the police arrived (I had called them). They chase this kid and bring him in. Parent agreed he's burned his bridges at my school, so he's working at home. Then his Dad calls and says I want one-on-one instruction with a teacher because you suspended him. (Extract 11.2, statement #3).

Whereas the extracts classified in the Specific category were primarily focused in internal aspects of schools, those classified in the Relationships category were typically concerned with boundary spanning functions, and especially difficulties associated with relating to parents and the broader community. Dealings with parents was a particularly persistent theme, which some principals returned to frequently over the course of the two years. Extract #3.3, for example, begins with Sue describing a situation where a group of parents set up a booth at a local mall to point out "weaknesses in teaching, saying methods from 30 years ago are better," while claiming that "they're not attacking the teachers--it's the system that's at fault" (Extract 3.3, statements #1 & #3). Related concerns about "complainer" and other problematic parents are included in other extracts, including some classified into other categories. One of the earlier discussions around this theme as captured in extract #2.2 also contained some good advice from Cam--a clear instance of a tip from one principal to his colleagues:

> A negative parent is a good reason to open up even more. I've invited parents from each division or grade to visit the school and see selected programs [in action]. I leave 15 minutes or so for a free walk into some classrooms, then back to the meeting. Over the year, all the parents come in. It's short, and I find other parents

> are a good resource to deal with complainers. The silent majority gets vocal in those situations. Plus you can't please everyone. (Extract 2.2. statement # 13)

This was such a novel and promising idea. that the following 21 statements in this extract were devoted to discussing how Cam organized this activity and the various advantages and disadvantages. In the course of this discussion. Cam pointed out that "it's a great way to deal with complainers." "Yes it is." responded Sue. "the parents tend to complain to one another out in the community. not to the teachers" (statements #21 & #22). Cam then tendered a little more advice and reflection:

> The program takes time. but there are rewards for the principal in terms of knowledge of community attitudes. I began to book larger groups for 1/2 hour. I listen a lot. and I find the others will contribute. You need to highlight a relevant program that goes K-8. like active learning. (Extract 2.2. statement # 23).

But while relating to and involving parents was a major theme within the Relationships category. it was by no means the only one. Other extracts classified in this category included #5.7 focusing on difficulties in co-ordinating work between teachers and head office consultants--an intra-system instance of boundary spanning--#10.2 dealing with alternative ways of paying and motivating teachers (and principals). and #12.5 wherein the discussion of coping with downloaded administrative work focused on strains placed on working relationships within participants' schools. Dan described one of the consequences of the computerized ordering of supplies: "We order all supplies at once. Once you start on AS 400. you don't stop. because it can be so hard to get on. [My secretary] once came in at 7:00 a.m. to try and get on!" Sue sympathized: "It's unreal: they say you can do this. but it's difficult. You can't give her [the secretary] one more job to do. so the principal covers. But she hasn't the time! Just because it's on the computer. doesn't make it easier. Head office just washes their hands though" (Extract 12.5. statements #14 & #15).

Yet by far the most extensive extract classified in the Relationships category was not concerned with external or boundary spanning matters. but with "difficult" teachers. Abe began discussion of this thread as follows:

> The problem has to do with the whole question of being positive with people. We have all had experience with a difficult staff member, and it's not incompetence. The bottom line is people are pretty good and I regret those situations and sometimes feel that it's because we're so positive about people, but there are always individuals who come along who are just bad people. Basically, they play the system for all it's worth. I'm not referring to the fact that .. not how to get up nerve, to talk about those going through the process ... and competence is in place, so dismissal is not there. These people can be a really negative influence. I'm not magnifying a personal confrontation. They're bad people. They can do damage. We've gone through the letters of reprimand, and we're stuck with them. How do you deal with these people?

Abe was deeply concerned about this issue, and his final sentence above was understood and accepted by all present as a sincere plea for help. The discussion that followed was wide ranging, serious and sensitive. Several principals shared what they thought were similar or related cases to that which was worrying Abe, and a number of possible ways of responding to the situation were canvassed. As the conversation developed, Abe shared several more specific instances, including the following:

> Another time I went back to my office at 3:40 and there's a child in tears sobbing on the phone to his parent, and I knew right away this is bad news. It was a busy time, new secretary, and she let the kid on the phone. I had the mother in immediately. He [the teacher in question] had detained some children on a number of occasions over the question of a test. It was a question of how to evaluate kids. This parent had to rescue the kid from detention. Parent wanted to see me, and told me this was the fourth time the kid had tried the test. Basically, the task was to match up parts of a lathe. Several children repeated and repeated. They just could not do it. So they were back in to write the test again. The child was not doing well, so the teacher phoned the parent and there was the classical parent confrontation.... So the fourth test was coming, and the child was detained after school. It turns out that the child was away the day of the original note, therefore had nothing to study from. Child didn't know what to do, so the parent bought an encyclopaedia to refer to and of course the picture in there had different labelling. I asked the teacher, "Did you see the note, check to see the note?" He replied, "He can come to me if he missed it." I think that is developmentally unsound. But when I confronted him, he

> whitewashed the whole thing, and said, "I just wanted to give these children the opportunity to pass." (Extract 3.1, statements #85 & #87 [edited])

After a total of 101 statements about and in response to Abe's problem, conversation veered off to consider other topics (Extracts #3.2 & #3.3 in particular), to eventually return to this theme for a final 34 statements. Group members were not prepared to leave without providing some further support and help for Abe. As it turned out--and as might have been predicted--no solution was found or offered. As Ben summed up the evening, "It was not really problem solving today, more of a professional discussion. There's no pat solution to the issue" (Extract 3.1, statement #135).

We called the third emergent classification category Philosophical. This is probably too grand a title, but seemed the most apt of the various alternatives that presented themselves. Extracts grouped in this category were generally concerned with broader educational and social issues which the principals saw as being intertwined into their work, and as the source of persistent, generic challenges and more pointed problems. We may have mis-classifed the short extract on safety and discipline, as it contains more than a few statements dealing with disciplinary practices and routines. It also contains another tip, this time from Eve:

> On our playground, I have two questions that I ask. I ask, "Did you make it safe?" and "Did you make it happy?" We can ask even the youngest child this. Like Cam, all my staff use this language, and we just don't accept violent behavior. (Extract 2.3, statement #1)

The tenor of this statement together with the broader context from which this extract was taken encouraged us to classify it as primarily a Philosophical exchange. Despite some of the specific instances given, the principals understood that they were discussing the key, enduring issue of how to ensure the safety of their students. Although we did not notice it when classifying the extracts, students in particular and children in general typically figured highly in most of the extract classified as primarily Philosophical. The key concerns in extract #5.1, for example, have to do with protecting individual children from the blind dictates of bureaucratic rules. Similarly, how to better protect and serve children in disadvantaged circumstances was the main focus of extract #13.4, which includes one statement on the desirability of establishing a Children's Ministry.

The longest extract classified in the Philosophical category was #5.5b. "Creating a climate for change"--this also being the longest in the entire set once the three component sections which were distributed across three sessions were combined. Once again it could be argued that this extract is mis-classified, the Specifics category being a more appropriate home for discussions of curriculum change, which is a main theme in this extract. Yet this extract differs in potentially important ways from #4.1, which also dealt with implementing curriculum change and which was classified in the Specifics category. As Cam explained during the course of the extract in question, the technical aspects of modifying curriculum took second place to the broader issue of "What do we do as administrators to ensure positive attitudes of staff? ... How do we move them along? (Extract 5.5b, statement #54). Abe's earlier comment spoke directly to this concern, and nicely reflects the main focus of the extract:

> I jumped on something Ben said [earlier in this extract]. We need to establish climate and tone in school as it relates to clientele of students and staff. To me my idea in terms of my job is to have the right climate and tone--the smell of the school is all important to me. To effect the group dynamic, to make it work positively, is the prime aspect of my job. I'm interested to know [the] changes from where to where. It's something I pick up in literature and conferences, that we're initiating junior level theory into intermediate grades--a picture of poor kids copying notes from the board. Would that it were so. Not that I love copying, but that's not the greatest problem we have in intermediate grades, especially when considering grades in a senior public [school] environment [such as Abe's]. The problem and challenge is to establish a positive school climate so [that] aberrant behavior doesn't come in. We need to create school climate in the context of that. I am concerned. Kids caring about work and deportment, should be at the top of the list. When talking about curriculum changes, are we dealing with those concerns? (Extract 5.5b, statement #7)

"That's a wide question!" responded Cam, and so it is, which provided a large part of our rationale for classifying the extract in the Philosophical category. Other related reasons also illustrated in Abe's comment were that this extract spoke more directly than many others to the principal's role and responsibilities--in both practical and ideal senses--while also retaining the concern with

students commented on earlier. As in the case of the discussion of difficult teachers--and as also may have been anticipated--no "magic bullet" solution to these broad concerns emerged from the discussion.

Table 4 provides descriptive statistics for the extracts grouped into the three emergent categories as discussed above. As noted in that discussion, 26 extracts were classified into the Specifics category, twice as many as were classified in the Relationships category which contained two more extracts than the Philosophical category. Yet the extracts in the Specifics category were generally shorter than those classified in the other categories, the median number of words for Specific extracts being 472, with the medians for the Relationships and Philosophical extracts being 556 and 560 respectively. The average length of the statements included in the Specific extracts was also markedly shorter and less variable than the other categories. Indeed, a clear progression is evident in the mean number of words per statement and in the associated standard deviations across the Specific, Relationship and Philosophical categories. Participants tended to spend less time talking about and to speak in shorter more compact statements when discussing topics related to the internal operation of schools, but to talk progressively longer when discussing less tangible, broader ranging issues.

Discussion

The statistical pattern noted immediately above is by no means a finding of great import, but it may point to a matter of some significance for the training and professional development of principals. Previous research as reviewed earlier suggests that informal conversations between principals are primarily concerned with internal aspects of school and school system operations--the kinds of issues and concerns that would fall naturally in the Specifics category as discussed above. This view is supported by related research, such as the survey of problems encountered by principals reported by Leithwood, Cousins and Smith (1989/90) and discussed in greater detail in Leithwood, Begley and Cousins (1992). Some of our earlier work has also helped reinforce this view, many of the specific problems we identified in interviews with principals being classified as

being of the STP type--that is involving Students, Parents and Teachers, usually interconnected with some aspect of the internal functioning of schools.

The analysis of the discussion group transcripts reported in this paper supports this view. Fully half of the topics discussed were classified in the Specific category as having to do with relatively concrete aspects of school functioning. Yet on the other hand, almost half of the conversational extracts taken from the transcripts had broader, more inclusive, more open, more abstract foci. Indeed, the two most sustained discussions were classified as dealing with Relationship and Philosophical issues. This observation is not offered to show that principals are *capable* of engaging in such higher level discussion; this point is not, or should not, be in dispute. The question is are there conversational settings available to principals that would allow (even encourage) them to indulge their evident ability and desire to do so? Given the highly institutionalized contexts within which most principals work, and given the organizational and social dynamics of their role, then finding the kind of secure and open conversational arenas that would foster broader professional discussion would seem difficult. From our observations and experiences in meeting, listening and talking to the principals participating in this study, there is much to be gained in creating and helping to sustain such conversational arenas.

A brief reflection on our search for problems in the practice of school administration is in order before we close. In retrospect, many of our difficulties in locating what we were prepared to recognize as suitable problems stemmed from our naiveté or, to put a sharper point on it, our initial relatively shallow understanding of the theories with which we were working. In our early thinking, we tended to conceptualize administrative problems as somewhat akin to butterflies that could be captured and then mounted on a display board for subsequent analysis, dissection or admiration. There is a certain viability in such a view; indeed, such an approach is not uncommon in the literature. Even so, it considerably oversimplifies the phenomenology of problem recognition. What one person may see as a butterfly, another may see as a bug, and yet another may recognize as a gyandamorph of the species such-and-such. Similarly, when it comes to recognizing and responding to problems, what qualifies as a problem for one person may appear as a routine matter

for another. The situation is further complicated in social action arenas where personalities, perceptions, attributions, values, norms and understandings may conspire to transform what would be a straightforward situation under some circumstances into a difficult problem under others.

Additional elements are folded into the mix when the social action arena is a formal organization, elements which may further complicate or may on occasion simplify the problems which an administrator recognizes and works on. One fundamentally important characteristic of organizational contexts is the hierarchical division of labour, responsibility and authority manifest in role delineation. By virtue of their position within the formal role structure administrators are expected and required to solve or otherwise deal with problems which their subordinates and certain authorized others cannot solve for themselves. In other words, there is a broad expectation that what appears as a difficult problem for a subordinate (and by extension a client, such as a parent in the case of principals) will appear as a relatively routine task for a competent administrator which she can either resolve directly, or route to the role incumbent who can. This is the dynamic that lay behind Ben's earlier quoted comment on principals as problem-solvers for others. But while we may legitimately expect principals to be able solve the many problems which students, teachers and parents bring to them, this does not mean they will be adept at solving their own problems, especially the ones only they can see or fully appreciate, such as Abe's difficult teacher and the generic challenge of creating a climate for change. We must nonetheless expect good principals to both recognize and actively engage themselves--and their staff--in working on and through such challenges, for that is the essence of a principal's work.

References

Allison, D. J. (1996a). Problem finding, classification and interpretation: In search of a theory of administrative problem processing. In K. A. Leithwood (Ed.), *International handbook of educational leadership and administration* (pp. 461—533). Dordrecht, NL: Kluwer Academic Publishers.

Allison, D. J. (1996b). *Problem processing and the principalship: Theoretical foundations and the expertise issue*. Paper presented at the symposium entitled *Clinical assessments of practical performance in school leadership: Findings from novice-expert studies of the elementary school principalship*, held at the annual meeting of the American Educational Research Association, New York City.

Allison, D. J. (1991). Pride and privilege: The development of the school superintendency in the United States and Canada. K. Leithwood & D. Musella (Eds.), *Understanding school system administration* (pp. 209—238). London: Falmer Press.

Allison, D. J. & Wells, A. (1989). School supervision in Ontario. In J. W. Boich, R. H. Farquhar & K. A. Leithwood, (Eds.), *The Canadian school superintendent* (pp. 69-114). Toronto: OISE Press.

Allison, D. J., & Allison, P. A. (1993). Both ends of a telescope: Experience and expertise in administrative problem solving. *Educational Administration Quarterly, 29*. 302—321.

Allison, D. J., & Allison, P. A. (1991). Students, teachers, parents and projects: Principals' perceptions of school problems. Paper presented to the Annual Conference of the American Educational Research Council, Chicago. (ERIC Document #ED 333 582).

Allison, D. J. & Allison P. A. (1990). *Similarities and singularities: A comparative analysis of the organizational size of Canadian school systems*. ERIC Document # ED 311 562. Paper originally presented to the annual meeting of the Canadian Association for the Study of Educational Administration, University of Laval, Quebec. June 1989.

Allison, D. J., & Nagy, P. (1991). A study of principal problem solving: An introduction the study. Paper presented to the Annual Conference of the American Educational Research Council. Chicago. (ERIC Document #ED 333 581).

Allison, D. J., & Morfitt, G. (in press). Time span of discretion and administrative work in school systems: Results of a pilot study. *Journal of Educational Administration and Foundations*.

Allison, D. J. & Morfitt, G. (1996). *Problem processing and the principalship: Design, methods and procedures*. Paper presented at the symposium entitled *Clinical assessments of practical performance in school leadership: Findings from novice-expert studies of the elementary school*

principalship, held at the annual meeting of the American Educational Research Association, New York City.

Bridges, E. M. (1982). Research on the school administrator: The state of the art. *Educational Administration Quarterly, 18*(3). 12--33.

Chi, M. T. H., Glaser, R., & Farr, M. J. (Eds.). (1988). *The nature of expertise*. Hillsdale, NJ: Erlbaum.

Cowan, D. A. (1986). Developing a process model of problem recognition. *Academy of Management Review, 11*. 763—776.

Cowan, D. A. (1991). The effect of decison-making styles and contextual experience on executives' descriptions of organizational problem formulation. *Journal of Management Studies*. 28. 465—483.

Cuban, L. (1976). *Urban school chiefs under fire*. Chicago: University of Chicago Press.

Day, D. V., & Lord, R. G. (1992). Expertise and problem categorization: The role of expert processing in organizational sense-making. *Journal of Management Studies, 29*. 35—47.

Dussault, M., & Thibodeau, S. (1996). Relationship between professional isolation of school principals and their performance at work. Paper presented to the annual meeting of the American Educational Research Association, New York, New York.

Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist, 49*. 725—747.

Garber, D. H. (1991). Networking among principals: A study of established practices and relationships. Paper presented to the 45th Annual Conference of the National Council of Professors of Educational Administration. Fargo, North Dakota.. (ERIC Document #ED 337915).

Greenfield, W. D. (1975). *Socialization processes among administrative candidates in public schools*. Paper presented at the annual meeting of the American Educational Research Association, Washington D.C.

Greenfield, W. D. (1977a). Administrative candidancy: A process of new role learning--Part 1. *The Journal of Educational Administration, 15*, 30--48.

Greenfield, W. D. (1977b). Administrative candidancy: A process of new role learning--Part 2. *The Journal of Educational Administration, 15*, 170--193..

Griffiths, D. E., Benben, J. S., Goodman, S., Iannaccone, L., & McFarland, W. J. (1958). *Teacher mobility in New York City: A study of the recruitment, selection, appointment and promotion of teachers in the New York City Public Schools*. New York University, School of Education.

Hallinger, P., Leithwood, K., & Murphy, J. (Eds.). (1993). *Cognitive perspectives on educational leadership*. New York: Teachers College Press.

Hoy, W. K., & Tarter, C. J. (1995). *Administrators solving the problems of practice: Decision-making concepts, cases, and consequences*. Boston: Allyn and Bacon.

Isenberg, D. J. (1984). How senior managers think. *Harvard Business Review, 62*(6), 81—90.

Jaques, E. (1976). *A general theory of bureaucracy*. London: Heinemann.

Jaques, E. (1986). The development of intellectual capacity: A discussion of stratified systems theory. *The Journal of Applied Behavioural Science, 22*, 361—383.

Jaques, E. (1989). *Requisite organization: The CEO's guide to creative structure and leadership*. Arlington, VA: Cason Hall.

Johnson, R. B., & Licata, J. W. (1983). Urban school principal grapevine structure. *Urban Education, 19* (4), 457--475.

Kelsy, J. G. T. (1993). Learning from teaching: Problems, problem-formulation, and enhancement of problem-solving capacity. In P. Hallinger, K. Leithwood, & J. Murphy, J. (Eds.). (1993). *Cognitive perspectives on educational leadership*, (pp. 231--252). New York: Teachers College Press.

Leithwood, K., Begley, P. T., & Cousins, J. B. (1992). *Developing expert leadership for future schools*. London: Falmer.

Leithwood, K. A., Cousins, B., & Smith, M. (1989/90). A description of the principal's world from a problem-solving perspective. *The Canadian School Executive, 9* (7), 9—12, & (8), 18—22.

Leithwood, K. A., & Montgomery, D. J. (1986). *Improving principal effectiveness: The principal profile*. Toronto: OISE Press.

Licata, J. W., & Hack, W. G. (1980). School administrator grapevine structure. *Educational Administration Quarterly, 16* (3), 82--99.

Lighthall, F. F., & Allan, S. D. (1989). *Local realities, local adaptations: Problem, process and person in a school's governance*. London: Falmer Press.

Mintzberg, H. (1973). *The nature of managerial work*. New York: Harper & Row.

Nagy, P. & Allison, P.A (1988). School-level decision making: A cognitive perspective. Paper presented at the annual meeting of the Canadian Society for the Study of Education. Windsor, Ontario.

Nagy, P. & Allison, P.A. (1989). Analysis of problem solving in school administration: A comparison of methods. Paper presented at the Annual Meeting of the Canadian Society for the Study of Education. Quebec.

Leithwood, K. & Steinbach, R. (1995). *Expert problem solving: Evidence from school and district leaders*. Albany, NY: State University of New York Press.

Reimann, P. & Chi, M. T. H. (1989). Human expertise. In K. J. Gilhooly (Ed.). *Human and machine problem solving*, (pp. 161—191). New York: Plenum Press.

Simon, H. A. (1993). Decision making: Rational, nonrational and irrational. *Educational Administration Quarterly, 29*. 392—411.

Simon, H. A., & Kaplan, C. A. (1989). Foundations of cognitive science. In M. I. Posner (Ed.). *Foundations of cognitive science*. (pp. 1—47). Cambridge, MA: MIT Press.

Srivastva, S. (1983). *The executive mind*. San Francisco: Jossey Bass.

VanLehn, K. (1989). Problem solving and cognitive skill acquisition. In M. I. Posner (Ed.). *Foundations of cognitive science*. (pp. 527-579). Cambridge, MA: MIT Press.

Vickers, G. (1984). Rationality and intuition. In Open Systems Group (Eds.). *The Vickers papers* (pp. 334—352). London: Harper & Row.

Wiggins, T. (1975). The influence of roles and organizational climate on principal behavior: A systems analysis. In W. G. Monahan (Ed.) *Theoretical dimensions of educational administration* (pp. 345--360). New York: MacMillan

Table 1
Principals participating in discussion group sessions

Name	Yrs as principal	System	Attendance at sessions		
			First Year N=7	Second Year N=6	Both years N=13
Abe	23	Ashland	6	4	10 (76%)
Ben	5	Beechglen	6	..	..
Cam	5	Ashland	7	5	12 (92%)
Dan	6	Cypress	7	5	12 (92%)
Eve	5	Dogwood	7	4	11 (85%)
Hal	9	Cypress	3	1	4 (31%)
Sue	6	Dogwood	7	5	11 (85%)
Ian	1	Independence	..	3	..

Table 2 Sample transcript extract (#5.2 Timetabling [edited])		
#	ID	Statement
1	Ben	Someone asked me about the timetable. You listen all year, find out what people want. Sacrifice things one at a time 'til the thing works.
2	Cam	It's one of the most important things we do as administrators. It can impact on a lot of things.
3	Ben	I arranged it so she didn't backtrack at all. Start here, move here at recess. I had the timetable all set up.
4	Cam	Is it the board and nails?
5	Ben	Yes.
6	Cam	That's the best. You can see everything.
7	Ben	Yes, if anything doesn't fit, you can lean it up on angle.
8	Cam	I used to use pencil and rubber, but I've found I need a visual model.
9	Ben	I use different coloured tags for each age group.
[Nine statements in original extract removed]. Conversation moves to budgets, as in extract 5.3. Later in the evening, during the discussion about creating a climate of change , a more technical exchange on timetabling occured, as extracted below. This exchange is also included in extract 5.5 where scheduling and other resource allocation issues appear as a major theme.		
19	Ben	I'd like to experiment with a new option [for the intermediate grades, i.e. 7 & 8] next year, with a computer person who's very involved, managing information via computer with a few kids in his home room. I'd like to set up computer technology against music--no one is kicked out of music--and maybe look at some other options. Can't eliminate art, but might throw in a dramatic arts option. Then, stretch lifestyles (not phys ed.). We always talk about what kids do that carries on after school, and I'd like to give them more experiences that they can take with them. We could counsel kids into other areas. I have the staff, but need to set up the timetable so it would work. I could [also] see integrating health and guidance into English.
20	Hal	Would you need more space?
21	Ben	No; I've got two 7s and two 8s and one split. If I fold the splits into the other classes for these options, I'd have four groups, and I could find the space. Another idea is to expose them to arts more. We could use a fixed period of time with a switch. Each kid would have to take an arts thing and one other, like computer tech. or lifestyles. I need to invite [the] superintendent to lunch and see if he likes it. Right now it's just rolling around in my head.
22	Cam	What are you doing this year?
23	Ben	All teachers do their own math, history, geography, health and guidance. One teacher does 400 minutes of physical education, one does all the art. Science is split between two teachers. I'd plan to reduce one science teacher to 480, the other to 320, and she would pick up his health to compensate. I need another 600 minutes of French in the intermediate division.
24	Hal	Is this a senior elementary?
25	Ben	K to 8.
One further comment about timetabling was made at the end of the evening and is included below as an apt coda for this extract:		
26	Ben	We talked about timetabling [earlier]. That seems to be the thing that makes you own a school. Where I went timetable was quasi set, then we got an additional teacher. I volunteered to re-do the timetable, even though I wasn't at that school yet. I knew why--I wanted things my way. There's a lot more to it than numbers. It represents how you set up a school. You hate to inherit someone else's timetable.

Table 3
Summary of topical extracts

Extract	Topic	Words	Stm'ts	Ratio	Content
1.1	**Orientation discussion**	**139**	**4**	**34.8**	**Meta**
1.2	Open House meetings	306	10	30.6	Specifics
1.3	Delegating	149	5	29.8	Specifics
1.4	Phones & intercoms	141	5	28.2	Specifics
2.1	Bus loading	581	37	15.7	Specifics
2.2	Involving staff & parents	916	45	20.4	Relationships
2.3	Safety & discipline	204	10	20.4	Philosophical
3.1	Difficult teachers	4.069	135	30.1	Relationships
3.2	Teachers in trouble & the unions	267	10	26.7	Relationships
3.3	"Dingbat" parents	1.499	65	23.1	Relationships
3.4	**In search of a problem to discuss**	**363**	**27**	**13.4**	**Meta**
4.1	Implementing mandated curriculum change	2.734	97	28.2	Specifics
4.2	Duty to implement policy	337	10	33.7	Philosophical
4.3	Purposes of schooling	548	14	39.1	Philosophical
4.4	**Curriculum continuity between schools**	**260**	**12**	**21.7**	**Special**
4.5	Credibility & accountability	164	9	18.2	Philosophical
5.1	Mandatory French & learning challenged pupils	902	37	24.4	Philosophical
5.2	Timetabling	613	26	23.6	Specifics
5.3	School budgets	288	14	20.6	Specifics
5.4	Establishing a design centre	597	19	31.4	Specifics
5.5a	**Creating a climate for change**	**3,283**	**55**	**59.7**	**[linked]**
5.5b	Creating a climate for change [plus 6.2 & 7.1]	4.103	105	39.1	Philosophical
5.6	Principal transfers & entry to new school	787	31	25.4	Specifics
5.7	Working with consultants & teachers	176	6	29.3	Relationships
6.1	Teacher unions	317	8	39.6	Relationships
6.2	**Creating climate for change (continued)**	**697**	**42**	**16.6**	**[linked]**
6.3	Demonstrating right beliefs & values	197	4	49.3	Philosophical
6.4	Reaching parents	179	7	25.6	Relationships
6.5	Special education models	560	23	24.3	Philosophical
7.1	**Climate for change (continued some more)**	**123**	**8**	**15.4**	**[linked]**
7.2	Integrating exceptional students	684	28	24.4	Philosophical
7.3	**Reflection on the discussion meetings**	**406**	**19**	**21.4**	**Meta**
8.1	Effects of the "Social Contract"	387	17	22.8	Specifics
8.2	Professional development days	1.221	49	24.9	Specifics
9.1	Participants' schools	345	19	18.2	Specifics
9.2	**Questions for Head of an independent school**	**635**	**24**	**26.5**	**Special**

Table 3
Summary of topical extracts

Extract	Topic	Words	Stm'ts	Ratio	Content
9.3	**More questions about independent schools**	**433**	**20**	**21.7**	**Special**
9.4	Teacher evaluation	191	9	21.2	Specifics
9.5	**Students and programs at independent school**	**234**	**11**	**21.3**	**Special**
10.1	Effects of contracting resources	499	35	14.3	Specifics
10.2	Paying teachers	1.019	67	15.2	Relationships
10.3	Dismissing a teacher	139	5	27.8	Specifics
10.4	Sue's remodelled school	634	32	19.8	Specifics
10.5	Design & Technology programs	1.531	56	27.3	Specifics
11.1	Eve's violent student	758	21	36.1	Specifics
11.2	Suspension stories	438	14	31.3	Specifics
11.3	Suspension policies	822	32	25.7	Specifics
11.4	Relating to community & staff	226	5	45.2	Relationships
11.5	Post-mortem on Eve's problem	445	34	13.1	Specifics
12.1	Keyboarding & computers	715	30	23.8	Specifics
12.2a	**Schoolwatch program**	**57**	**5**	**11.4**	**[linked]**
12.2b	Schoolwatch program [plus 13.3]	307	20	15.4	Specifics
12.3	Bloody nose suspension	684	13	52.6	Specifics
12.4	Where did we go wrong?	801	29	27.6	Philosophical
12.5	Coping with downloaded administrative work	647	28	23.1	Relationships
13.1	Arson at local secondary school	232	15	15.5	Specifics
13.2	Fire drills	114	7	16.3	Specifics
13.3	**Schoolwatch (continued)**	**250**	**15**	**16.7**	**[linked]**
13.4	At risk children and social ills	938	48	19.5	Philosophical
13.5	Transition back to the principalship	556	16	34.8	Relationships
13.6	Changes in parent attitudes	611	25	24.4	Relationships
13.7	Communications & trustees	177	7	25.3	Relationships

Table 4
Statistical data for topical extracts

Extract type:	N	Total words			Number of statements			Words / statement	
		min	median	max	min	median	max	mean	s.d.
Original set:	60	57	442	4.069	4	19	135	25.8	9.6
Excluded from additional analysis (3 linked extracts not tabulated)									
Meta	3	139	363	406	4	19	27	23.2	10.8
Special	4	234	347	635	11	16	24	22.8	2.5
Sub-total	7	139	363	635	4	19	27	22.9	6.4
Retained for additional analysis									
Specifics	26	114	472	2.734	5	19.5	97	24.6	8.4
Relationships	13	176	556	4.069	5	16	135	27.9	8.1
Philosophical	11	164	560	4.103	4	23	105	29.1	9.9
Sub-total	50	114	552	4.103	4	19.5	135	26.5	8.7

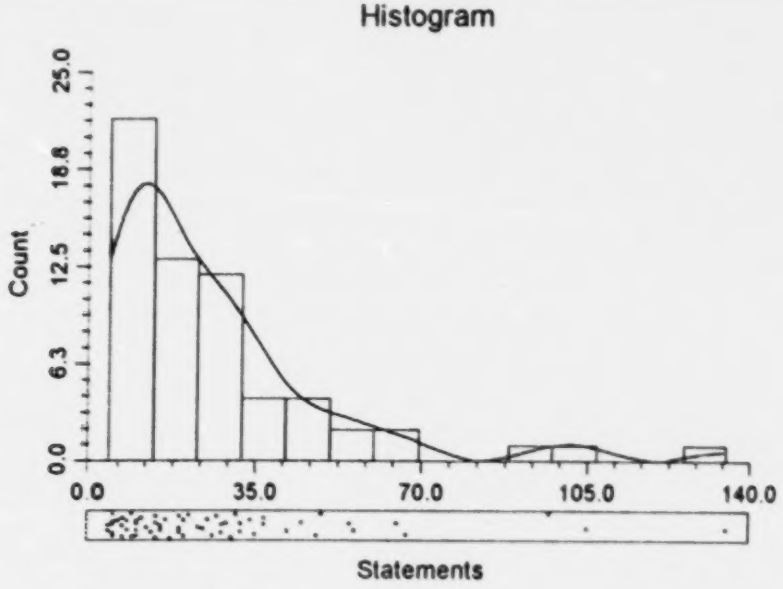

Figure 1
Histogram of number of statements per extract